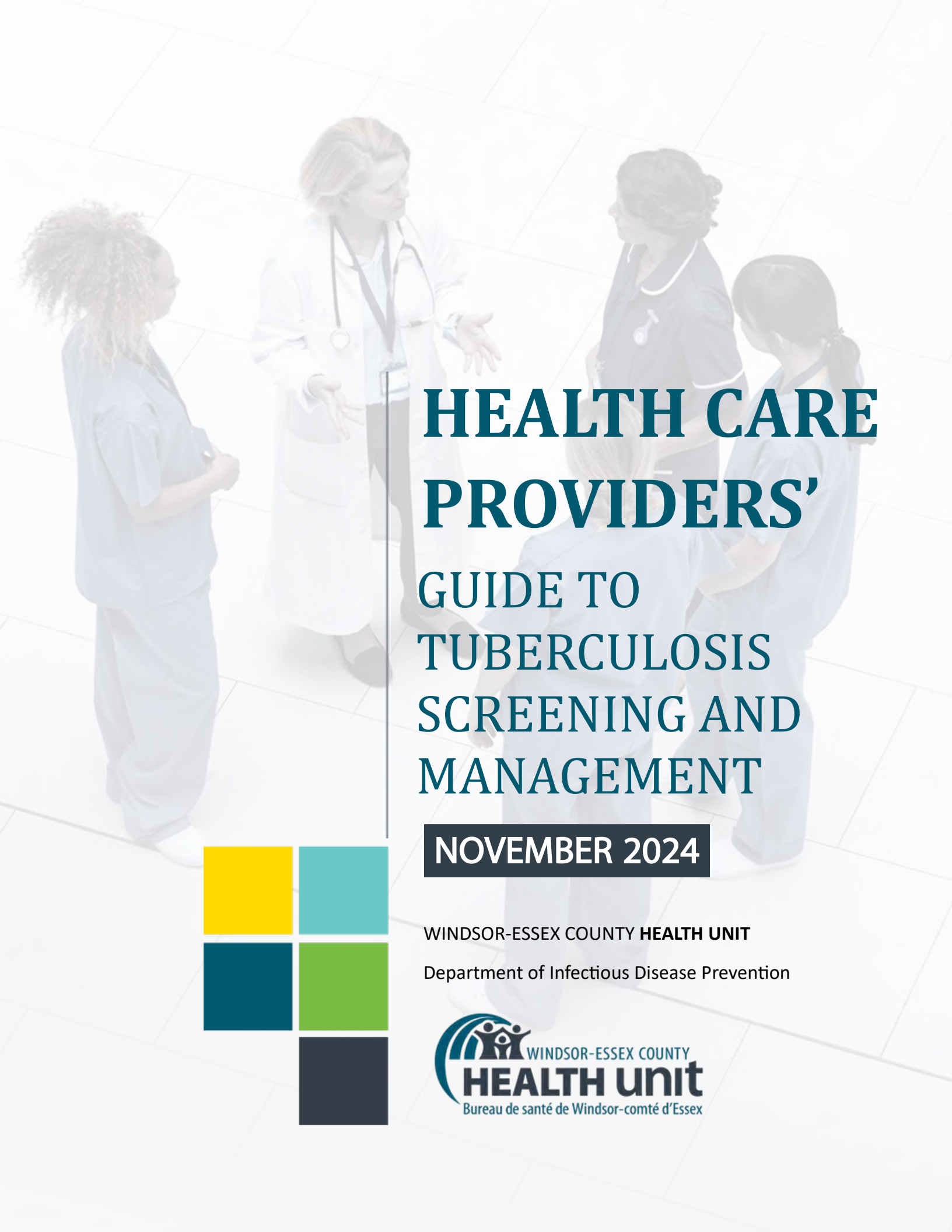

HEALTH CARE PROVIDERS'

GUIDE TO TUBERCULOSIS SCREENING AND MANAGEMENT

NOVEMBER 2024

WINDSOR-ESSEX COUNTY **HEALTH UNIT**

Department of Infectious Disease Prevention

WINDSOR-ESSEX COUNTY HEALTH unit
Bureau de santé de Windsor-comté d'Essex

The Windsor-Essex County Health Unit (WECHU) is dedicated to providing public health programs and services to the community. Public health programs keep our community healthy by promoting improved health, preventing disease and injury, controlling threats to human life and function, and facilitating social conditions to ensure equal opportunity in attaining health for all.

Our Health Unit, in partnership with our agencies and health care providers, seeks to enable all Windsor and Essex County residents to be as healthy as possible.

Please feel free to reach out to any of the TB nurses with any questions or concerns. The TB helpline is also available and answered Monday to Friday 8:30-4:30 at **519-258-2146 ext. 1420.**

CONTENT DISCLAIMER

The information in this document is presented for general purposes. We do not guarantee or warrant the quality, accuracy, completeness, timeliness, appropriateness, or suitability of the documents content. We expressly disclaim all warranties, representations and conditions regarding use of this document and its content.

WINDSOR-ESSEX COUNTY **HEALTH UNIT**

1005 Ouellette Avenue
Windsor, ON, N9A 4J8
www.wechu.org
519-258-2146 ext. 1420 | Fax: 226-783-2132

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INTRODUCTION

Tuberculosis (TB) is an airborne disease caused by the bacteria *Mycobacterium tuberculosis*, which primarily affects the lungs but can develop in any part of the body. There are two forms of TB: active TB disease and TB infection (formerly known as latent TB infection). Active disease means that the bacteria are growing, causing symptoms, and can be transmitted to others (if located in the lungs), while TB infection (TBI) means that the TB bacteria are in the body but inactive. TBI cases can become active if the TB bacteria "wake up." TB is most often found in the lungs and this type is known as pulmonary TB; however, the disease can affect any part of the body. Non-pulmonary TB is known as extra-pulmonary. Common symptoms of TB include but are not limited to a persistent cough and coughing up phlegm, chest pain, tiredness/weakness, lack of appetite and unintentional weight loss, fever, and/or night sweats. While TB is curable, if left untreated the disease can be fatal.

While Canada is considered a low-incidence country, most TB cases inequitably persist among socioeconomically disadvantaged and historically marginalized people. Rates in Ontario and Windsor-Essex County (WEC) have been steady rising over the past several years, as well as the incidence of multi-drug and extensive drug-resistant TB, which poses a significant public health risk.

Clinicians play a vital role in the TB prevention, screening and control pipeline. Effective interventions for individuals who are confirmed or suspected of having TB can be a significant contributor towards mitigating the burden on providers and patients, and help Canada eliminate the disease entirely. This manual provides clinicians with clinical guidelines for screening and management, and information about reporting to the Windsor-Essex Country Health Unit. The Health Unit is also available for individual consultation, if required.

DUTY TO REPORT

Tuberculosis is considered a disease of public health significance, (DOPHS) and, as such, must be reported to the Windsor-Essex Country Health Unit. The Health Protection and Promotion Act 1990 (HPPA), R.S.O., 1990, and Ontario Reg. 135/18, outlines the requirements for physicians, practitioners, laboratories, and institutions to report all positive TB skin tests or interferon gamma release assays (IGRA), and suspect and confirmed active TB cases to the Medical Officer of Health.

TB reporting forms should be completed and faxed within **7 days for TBI** and **24 hours for suspect or confirmed active TB** to the Windsor-Essex County Health Unit (WECHU) at 226-783-2132. The TB reporting form can be found in Section 2.0 of this guide.

Timely and complete case reporting allows the Health Unit to complete assessments, conduct surveillance, and coordinate treatment for clients and their contacts. This process ensures that the local TB program adheres to provincial guidelines to prevent secondary transmission and further facilitate population-level approaches to prevention and control.

TB MEDICAL SURVEILLANCE

Immigration, Refugees, and Citizenship Canada (IRCC) requires certain individuals to complete tuberculosis medical surveillance (TBMS) as a condition of entry or continued residence in Canada. Individuals are placed on TBMS for the following reasons that are identified during the immigration process:

- Classified as being at higher risk for developing active pulmonary TB disease
- May have TBI and are at risk of progressing to active disease
- Abnormal chest x-ray findings
- Previous history of TB which was discovered during their Immigration Medical Exam

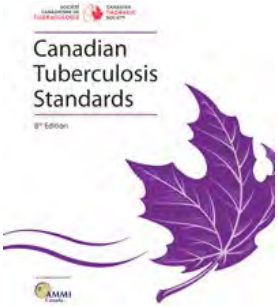
TBMS consists of a medical examination to rule out active disease, including:

1. A physical exam and symptom assessment for pulmonary and extra-pulmonary TB.
2. Chest x-ray – anterior/posterior and lateral views. Previous chest x-rays are not acceptable.
3. If the individual has an abnormal chest x-ray and/or is symptomatic, collection of three spontaneous sputum samples (at least one hour apart up to 1 day apart).
4. Other appropriate tests as deemed necessary (e.g., additional or repeat diagnostic imaging).
5. A tuberculin skin-test (TST) [1], if active disease is ruled out and there is no previous history/documentation of TB available.
    a. If applicable, discuss Tuberculosis Preventative Treatment (TPT) with the individual.
6. Complete the *Medical Surveillance Healthcare Provider Report* and send the form along with any test results (e.g., chest x-rays) to the WECHU by fax to **226-783-2132.**
7. The WECHU will confirm to IRCC that the medical surveillance requirement was met.

[1] A TST is not a mandatory IRCC medical surveillance requirement, although highly encouraged.

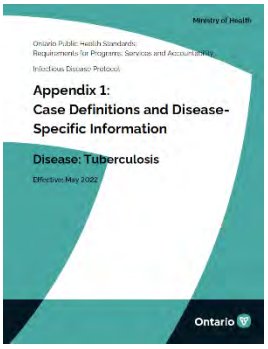
NATIONAL AND PROVINCIAL TB GUIDELINES AND RECOMMENDATIONS

This section summarizes the provincial and national guidelines for tuberculosis screening, reporting, and management. For more detailed information and guidance, please refer to each cited source, along with other published guidance.



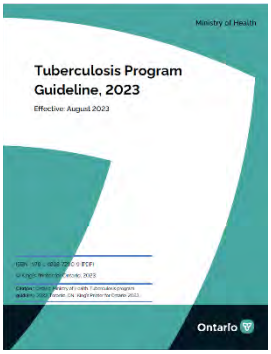
The Canadian Tuberculosis Standards, 8th Edition

The Canadian Tuberculosis Standards (8th Ed.) is a document that aims to provide "practice management information to public health and clinical professionals on all aspects of the pathogenesis, epidemiology, and management of TB in Canada." Note that this document is not meant to supersede any provincial guidelines, protocols, or processes.



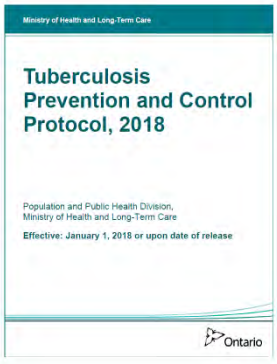
Ministry of Health Infectious Disease Protocol – Appendix 1: Tuberculosis

The Infectious Disease Protocol Appendix for Tuberculosis contains case definitions and disease-specific information for healthcare providers to guide testing, case/outbreak management, and surveillance. This document is continuously updated, so it is recommended to view it from the ministry's website to ensure the most up-to-date version is being referenced.



Ministry Of Health Tuberculosis Program Guidelines

The Tuberculosis Program Guidelines (2023) aims to "provide boards of health with direction for how to approach tuberculosis prevention and care through programs and services that work towards achieving the global goal of TB elimination."



Ministry of Health TB Prevention and Control Protocol

The Tuberculosis Prevention and Control Protocol (2018) aims to "provide direction to boards of health to reduce the burden of tuberculosis through prevention and control."

WECHU TB Preventative Treatment (TPT) Guidelines

The Canadian TB Standards (8th Ed.) recommends treating patients for TB infection with TPT, especially those at increased risk for developing TB disease. Active disease must be ruled out before starting treatment.

The following table identifies patients at risk for developing active TB disease:

Very High Risk	• People living with HIV • Child or adolescent (<18y) TB contact • Adult (≥18y) TB contact • Silicosis
High Risk	• Stage 4 or 5 chronic kidney disease with or without dialysis • Transplant recipients (solid organ or hematopoietic) • Fibronodular disease • Receiving immunosuppressing drugs (e.g., tumor necrosis factor α inhibitors or steroids) • Cancer (lung, sarcoma, leukemia, lymphoma or gastrointestinal)
Moderate Risk	• Granuloma on chest x-ray • Diabetes • Heavy alcohol use (at least 3 drinks/day) • Heavy tobacco cigarette smoker (at least 1 pack/day)
Low Risk	• General (adult) population with no known risk factor • Persons with a positive two-step TST booster and no known risk factor

Individuals who were born in countries with a TB incidence of ≥50/ 100,000 should also be considered for TPT, especially if they have additional risks for developing TB disease. For TB incidence in individual countries, see the World Health Organization country TB profiles: https://worldhealthorg.shinyapps.io/tb_profiles/

Recommended Treatment Regimens for TB

Refer to the Canadian TB Standards (8th Ed.) for additional information on treatment, including considerations for specific populations (e.g., organ transplant, HIV, pregnant and breastfeeding, older adults).

Regimen†	Duration	Dose	Frequency	Additional Considerations
First-line regimen* Rifampin (4R)	4 months (120 doses)	Adults: 10mg/kg Children: 10-20mg/kg Maximum: 600mg Available in: 300mg and 150mg capsules	Daily	Rifamycins are inducers of hepatic metabolizing enzymes, including cytochrome P450 enzymes, which can result in increased elimination of many other medications. Interactions between patients' baseline medications and Rifampin should be reviewed using an up-to-date drug decision support tool prior to treatment initiation.
Second-line regimen Isoniazid (9H)	9 months (270 doses)	Adults: 5mg/kg Children: 10-15mg/kg Maximum: 300mg Available in: 300mg and 100mg tablets, and 10mg/mL liquid	Daily	Pyridoxine (Vitamin B6) 25mg daily is recommended to be given at each dose to minimize the risk of neuropathy.
Alternative regimen Isoniazid (6H)	6 months (180 doses)	Adults: 5mg/kg Children: 10-15mg/kg Maximum: 300mg Available in: 300mg and 100mg tablets, and 10mg/mL liquid	Daily	Pyridoxine (Vitamin B6) 25mg daily is recommended to be given at each dose to minimize the risk of neuropathy.

*Publicly funded Rifapentine (3HP) is only available to manage outbreaks and other exceptional circumstances and requires approval from the Office of the Chief Medical Officer of Health, in consultation with the Ministry of Health.

†Depending on the TB treatment regimen a healthcare providers prescribes, treatment for TB in children can vary based on weight and diagnosis. TB treatment regimen should be individualized based on the child's clinical needs.

Recommended Baseline Testing and Monitoring

Baseline	For all regimens: • Complete blood count (CBC) • Alanine aminotransferase (ALT) • Bilirubin • Hepatitis B and C, and HIV serologies
After one month of treatment	For all regimens: • ALT • Bilirubin Additionally, for 4R regimen: • CBC Patients taking 4R do not require further laboratory monitoring during treatment unless the patient has an abnormal test result, develops symptoms suggesting an adverse event, or has risk factors for hepatotoxicity*.
Monthly	For 9H and 6H in patients with risk factors for hepatotoxicity*: • ALT • Bilirubin

*Pregnancy or first 3 months postpartum, history of previous drug-induced hepatitis, current cirrhosis or chronic active hepatitis of any cause, hepatitis C, hepatitis B with abnormal transaminases, daily alcohol consumption or concomitant treatment with other hepatotoxic drugs (e.g., methotrexate), over age 50 years (for 9H and 6H).

Windsor-Essex County Health Unit Monitoring and Dispensing

Patients with a prescription can obtain TB medication for free from the Windsor-Essex County Health Unit by appointment. Prescriptions can be faxed to **226-783-2132**. Patients are regularly followed up by the Health Unit to assess for medication tolerability and to encourage adherence. For further information or if you have questions about TPT, call **519-258-2146 ext. 1420**.

WECHU AND PHO REPORTING FORMS

This section contains the reporting forms for clients with probable, suspect, or confirmed tuberculosis. These forms may be subject to change.

Please visit **wechu.org** or **publichealthontario.ca** for the most up-to-date and downloadable versions.

WINDSOR-ESSEX COUNTY HEALTH UNIT
Bureau de santé de Windsor-comté d'Essex

TUBERCULOSIS (TB)

HEALTH CARE PROVIDER INVESTIGATION AND REPORTING FORM

This form is required to be completed and faxed within 7 days for latent TB infection (LTBI) and by the next working day for suspect or confirmed active TB to the Windsor-Essex County Health Unit (fax: 226-783-2132).

PATIENT INFORMATION		
Date (YYYY/MM/DD):	Name and contact number of reporting health care provider: ( ) - ext.	
Name of Client: (Last) (First) (Middle)		
Date of Birth: (YYYY/MM/DD)	Age:	Sex:
Address: (Street) (City) (Postal Code)		
Home Phone: ( )	Alternate Phone: ( )	
Country of Birth:	Date of Arrival to Canada: (YYYY/MM/DD)	

MANTOUX TUBERCULIN SKIN TESTING (TST) OR INTERFERON-GAMMA RELEASE ASSAY (IGRA)

Reason for Testing:

☐ Routine (e.g., work, school, volunteer, correctional facility, residents of LTCH)

☐ Targeted High Risk (e.g., foreign born, recent immigrant, travel to endemic country, HIV positive, underlying medical concern, residing in shelters) Countries traveled to:_____

☐ Contact of Active TB

☐ Other, please specify: _____

TST Result: Please refer to interpretation chart on page 2

Date Administered (YYYY/MM/DD)	Date Read (YYYY/MM/DD)	Result (mm)
		mm
		mm

IGRA Result: ☐ Positive ☐ Negative *This is not a mandatory test and not covered under OHIP.*
***If done, please fax IGRA results with this form*.**

ASSESSMENT

All clients with positive TST/IGRA must be assessed for signs/symptoms and require a chest x-ray to rule out active TB, **regardless of BCG vaccination history.** ☐ ***Chest x-ray report faxed with this form***.

	Symptom	Onset Date (YYYY/MM/DD)	Symptom	Onset Date (YYYY/MM/DD)
Signs & Symptoms	☐ Asymptomatic	N/A	☐ Weight loss	
	☐ Cough - dry		☐ Fatigue	
	☐ Cough - productive		☐ Night sweats	
	☐ Hemoptysis		☐ Other	
	☐ Fever			

The Health Protection and Promotion Act 1990 (HPPA), R.S.O., 1990, and Ontario Reg. 135/18 outlines the requirements for physicians, practitioners, and institutions to report **suspect or confirmed Tuberculosis (TB)**, including all positive TB skin tests, to the Medical Officer of Health.

Client Name:_____

HIV TESTING (recommended for all clients with a positive TST or IGRA result, or active TB)
Date of HIV test (YYYY/MM/DD):_____ ☐ Client refused
Result: ☐ Positive ☐ Negative ☐ Indeterminate

INTERPRETATION OF TST RESULTS (as per Canadian Tuberculosis Standards, 8th edition)	
TST Result	**Situation in which reaction is considered positive**
<5 mm	In general, this is considered negative
≥ 5 mm	• People living with HIV • Known recent (<2 years) contact with a patient with infectious TB disease • Fibronodular disease on chest x-ray (evidence of healed, untreated TB) • Prior to organ transplantation and receipt of immunosuppressive therapy • Prior to receipt of biologic drugs, such as tumor necrosis factor alpha inhibitors, or disease-modifying antirheumatic drugs • Prior to receipt of other immunosuppressive drugs, such as corticosteroids (equivalent of ≥15mg/day of prednisone for at least 1 month) • Stage 4 or 5 chronic kidney disease (with or without dialysis)
≥ 10 mm	• Recent (<2 years) conversion of TST from negative to positive • Diabetes (controlled or uncontrolled) • Malnutrition (<90 % ideal body weight) • Current tobacco smoker (any amount) • Daily consumption of >3 alcoholic drinks • Silicosis • Hematologic malignancies (lymphomas and leukemia) and certain carcinomas (such as cancers of head, neck, lung and/or gastrointestinal tract) • Any population considered at low risk of disease)

☐ **LTBI**	
Diagnosis	LTBI is diagnosed when the client with positive TST has a negative chest x-ray and is asymptomatic.
Treatment	☐ Recommended for client, and client accepted treatment. *Free TB medications are dispensed by the Health Unit* ***by appointment.*** ☐ Recommended for client, however client declined treatment. ☐ Not recommended by physician/nurse practitioner. Specify reason:
Follow-Up	☐ Informed client/parent that a nurse from the Health Unit will be contacting them.

☐ **SUSPECT PULMONARY TB** ☐ **SUSPECT EXTRA-PULMONARY TB**	
Diagnosis	**Suspect TB Case Definition** Client has **signs and symptoms*** compatible with active disease **AND AT LEAST ONE OF THE FOLLOWING:** • Radiological findings suggestive of active disease; **OR** • Demonstration of acid-fast bacillus (AFB) in clinical specimen.
Management	**PULMONARY TB** ☐ Informed client to self-isolate. ☐ Collected a minimum of 3 sputum samples (either spontaneous or induced) at least 1 hour apart. **EXTRA-PULMONARY TB** ☐ Collect sample(s) from suspected affected site(s). Refer to Public Health Ontario's Test Information Index for sample collection requirements.
Follow-Up	☐ Informed client/parent that a nurse from the Health Unit will be contacting them.

The Health Protection and Promotion Act 1990 (HPPA), R.S.O., 1990, and Ontario Reg. 135/18 outlines the requirements for physicians, practitioners, and institutions to report **suspect or confirmed Tuberculosis (TB)**, including all positive TB skin tests, to the Medical Officer of Health.

Client Name:_____

☐ **CONFIRMED PULMONARY TB** ☐ **CONFIRMED EXTRA-PULMONARY TB**	
Diagnosis	**Confirmed TB Case Definition** • Laboratory confirmed case: cases with *Mycobacterium tuberculosis* complex (MTB complex) demonstrated on culture from an appropriate clinical specimen (e.g., sputum, body fluid or tissue); **OR** • Detection of MTB complex by polymerase chain reaction (PCR) with compatible clinical and epidemiological associated information.
Management	**PULMONARY TB** ☐ Informed client to self-isolate. **EXTRA-PULMONARY TB** ☐ Assessed for pulmonary TB by chest radiography. ☐ Collect a minimum of 3 sputum samples **IF** indicated by radiological findings or respiratory symptoms. ☐ Inform client to self-isolate **IF** indicated by radiological findings or respiratory symptoms.
Follow-Up	☐ Informed client/parent that a nurse from the Health Unit will be contacting them.

* **Signs and symptoms** compatible with active disease may include:

- Fever
- Night sweats
- Loss of appetite
- Weight loss
- Fatigue

Symptoms of extra-pulmonary TB depend on the body site(s) affected and may include:

- **Lymphatic:** swollen lymph nodes
- **Bones:** pain in the bones or back
- **Joints:** pain, redness, swelling
- **Renal:** painful urination, cloudy urine
- **Central Nervous System:** headaches, stiff neck, hurts to move head or eyes
- **Cardiovascular:** hard to catch your breath; may have chest pain
- **Gastrointestinal:** may get stomach pain and change in bowel movements
- **Ocular:** blurred vision; eye pain, conjunctivitis, vision loss

This form may be out of date. The most current form is accessible on our website: https://www.wechu.org/tuberculosis-tb-management/tuberculosis-reporting-form.

For more information: 519-258-2146 ext. 1420

Infectious Disease Prevention
www.wechu.org

The Health Protection and Promotion Act 1990 (HPPA), R.S.O., 1990, and Ontario Reg. 135/18 outlines the requirements for physicians, practitioners, and institutions to report **suspect or confirmed Tuberculosis (TB)**, including all positive TB skin tests, to the Medical Officer of Health.

General Test Requisition

Public Health Ontario | Santé publique Ontario

ALL sections of the form must be completed by authorized health care providers for each specimen submitted, or testing may be delayed or cancelled.

Verify that **all testing requirements** are met before collecting a specimen.

For **HIV, respiratory viruses, or culture isolate** requests, use the dedicated requisitions available at: publichealthontario.ca/requisitions

Submitter / Health Care Provider (HCP) Information

Licence No.: Lab / Hospital or Facility Name:

HCP Full Name: Address:

City: Postal Code: Province:

Tel: Fax:

Copy to Other Lab / Health Unit / Authorized Health Care Provider (HCP)

Licence No.: Other Lab / Health Unit / Facility Name:

HCP Full Name: Address:

City: Postal Code: Province:

Tel: Fax:

Patient Setting

- ☐ Clinic / Community
- ☐ ER (Not Admitted / Not Yet Determined)
- ☐ ER (Admitted)
- ☐ Inpatient (Non-ICU)
- ☐ ICU / CCU
- ☐ Congregate Living Setting

Testing Indication(s) / Criteria

- ☐ Diagnosis
- ☐ Screening
- ☐ Immune Status
- ☐ Follow-up / Convalescent
- ☐ Pregnancy / Perinatal
- ☐ Impaired Immunity
- ☐ Post-mortem

Other (Specify):

Signs / Symptoms

- ☐ No Signs / Symptoms
- ★ **Onset Date (yyyy-mm-dd):**
- ☐ Fever
- ☐ Rash
- ☐ STI
- ☐ Gastrointestinal
- ☐ Respiratory
- ☐ Hepatitis
- ☐ Meningitis / Encephalitis

Other (Specify):

Relevant Exposure(s)

- ☐ None / Not Applicable
- Most Recent Date (yyyy-mm-dd):
- Occupational Exposure / Needlestick Injury (Specify): ☐ Source ☐ Exposed

Other (Specify):

Relevant Travel(s)

- ☐ None / Not Applicable
- Most Recent Date (yyyy-mm-dd):

Travel Details:

For Public Health Ontario's laboratory use only:

Date Received (yyyy-mm-dd): PHO Lab No.:

Patient Information

Health Card No.:

Date of Birth (yyyy-mm-dd): Sex: ◉ Male ○ Female

Medical Record No.:

Last Name (per health card):

First Name (per health card):

Address: Postal Code:

City: Tel:

Investigation / Outbreak No. from PHO or Health Unit (if applicable):

Specimen Information

★ **Date Collected (yyyy-mm-dd):** **Submitter Lab No.:**

- ☐ Whole Blood
- ☐ Serum
- ☐ Plasma
- ☐ Bone Marrow
- ☐ Cerebrospinal Fluid (CSF)
- ☐ Nasopharyngeal Swab (NPS)
- ☐ Oropharyngeal / Throat Swab
- ☐ Sputum
- ☐ Bronchoalveolar Lavage (BAL)
- ☐ Endocervical Swab
- ☐ Vaginal Swab
- ☐ Urethral Swab
- ☐ Urine
- ☐ Rectal Swab
- ☐ Faeces

Other (Specify type AND body location):

Test(s) Requested

Enter each assay as per the publichealthontario.ca/testdirectory:

1. Mycobacterium
2.
3.
4.
5.
6.

For routine hepatitis A, B or C serology, complete this section instead:

Hepatitis A
- ☐ Immune Status (HAV IgG)
- ☐ Acute Infection (HAV IgM, signs/ symptoms info)

Hepatitis B
- ☐ Immune Status (anti-HBs)
- ☐ Chronic Infection (HBsAg + total anti-HBc)
- ☐ Acute Infection (HBsAg + total anti-HBc + IgM if total is positive)
- ☐ Pre-Chemotherapy Screening (anti-HBs + HBsAg + total anti-HBc)

Hepatitis C
- ☐ Current / Past Infection (HCV total antibodies)
  No immune status test for HCV is currently available.

The personal health information is collected under the authority of the Personal Health Information Protection Act, s.36 (1)(c)(iii) for the purpose of clinical laboratory testing. If you have questions about the collection of this personal health information please contact the PHO's Laboratory Customer Service at 416-235-6556 or toll free 1-877-604-4567. F-SD-SCG-1000, version 004.1 (January 2024).

Ontario

A Guide to Complete the PHO General Test Requisition

ALL sections of the form must be completed legibly for each specimen submitted, or testing may be delayed or cancelled.

The use of pre-populated fields is not recommended as the fields may be outdated or erroneously used for other patients. If pre-populated requisitions are used, make sure that all the fields are still applicable and current.

For HIV, respiratory viruses, cultured isolates, or environmental samples, please use the dedicated requisitions available at www.publichealthontario.ca/requisitions.

Submitter / Health Care Provider Information

1. The ordering health care provider must be authorized to order laboratory tests in Ontario as per the Laboratory and Specimen Collection Licensing Act O. Reg. 45 s. 18.
2. Fill all ordering health care provider information accurately for the test to be approved and results to be transmitted to the correct provider.
3. **HCP Full Name field:** laboratories and hospitals should provide the Laboratory Director as the submitter, or in medical clinics with rotating health care providers, include the name of the attending health care provider.
4. **Licence No. field:** fill with the OHIP billing number, CPSO number, or other regulated health care professions' college registration number.
5. **Copy To field:** in addition to the primary submitter, if a copy of the results need to be shared with another provider, complete the additional fields. If submitting from hospitals, include the name of the ordering HCP.

Patient Setting

1. Check the setting most applicable to the current patient encounter. Examples of congregate living settings include long-term care homes, shelters, group homes, and correctional facilities.

Testing Indication(s) / Criteria

1. Check or write the reason(s) for testing. This may assist in assay selection or interpretation at PHO.

Signs / Symptoms

1. Some tests may not be approved unless clinical information is detailed. Refer to the test menu for approval criteria.
2. **Onset Date field:** the star is a visual reminder to fill this field if signs or symptoms are present, as the field is often missed by submitters.

Relevant Exposure(s) / Relevant Travel(s)

1. Some tests may not be approved unless exposure or travel information is provided. Refer to the test menu for approval criteria.
2. **Occupational Exposure/Needlestick Injury field:** if applicable, specify whether the specimen is collected from the source of exposure or the exposed individual.

Patient Information

1. Fill all patient information accurately for the test to be approved and results to be assigned to the correct patient.
2. The patient identifiers on the specimen container must be identical to those on the requisition, or testing will be cancelled.
3. When a result is positive for a disease of public health significance, a report will be issued to the health unit where the patient resides as per the Health Protection and Promotion Act O. Reg. 569 s. 3. If the patient has no address listed, the report will be issued to the health unit where the ordering provider is located.
4. **Health Card No. field:** Do not leave blank. Instead, write "not available" if unknown.
5. **Investigation/Outbreak No. field:** if a number was assigned to the patient encounter by PHO or a health unit for the purpose of investigations, fill and make sure the number is accurate and current.

Specimen Information

1. **Date Collected field:** the star is a visual reminder to fill this field, as this field is often missed by submitters.
2. **Submitter Lab No. field:** Provide if available.
3. **Other field:** specify both the type of specimen (e.g. skin swab, lymph node biopsy, synovial fluid aspirate, unstained smear) and the body location (e.g. right arm, supraclavicular, left knee, vaginal).

Test(s) Requested

1. Enter each assay name individually as per PHO's current test menu: www.publichealthontario.ca/testdirectory. Test names must be CLEAR and LEGIBLE. Be as specific as possible. For assays with multiple organisms tested (i.e. multiplex testing), enter the assay name instead (for example, gastroenteritis virus detection).
2. Verify that the specimen type, collection, storage, and transport requirements are met before submission as per the test menu.
3. If testing requires pre-approval, contact PHO's laboratory Customer Service Centre (see below) for approval.
4. **Routine hepatitis A, B, and C Serology testing section:** for routine hepatitis A, B, or C serology requests, check one of the applicable boxes. If additional individual markers are required (e.g. HBsAg only for occupational exposures, HBeAg/anti-HBe for hepatitis B infection follow-up), these may be ordered individually in the free text fields above under Test(s) Requested. For acute hepatitis A and B infection testing, clinical information is required or testing may be cancelled or delayed.
5. PHO's laboratory only performs tests that are insured services within the meaning of Ontario's Health Insurance Act, s. 11.
6. No additional test will be added to the previously submitted specimens except under exceptional circumstances. If additional tests are required, please submit another specimen and requisition.

Technical Considerations

1. When integrating the General Test Requisition within the electronic medical record systems, please ensure that the overall layout stays the same, scale text (font size) automatically, and remove any options that 'scroll long text'.

Public Health Ontario's Laboratory

Customer Service Centre

Monday to Friday	7:30 am – 7:00 pm EST/EDT
Saturday	8:00 am – 3:45 pm EST/EDT

Tel.: 416-235-6556
Toll Free: 1-877-604-4567
Email: customerservicecentre@oahpp.ca
Website: www.publichealthontario.ca

Ontario

WINDSOR-ESSEX COUNTY HEALTH UNIT
Bureau de santé de Windsor-comté d'Essex
519-258-2146 | wechu.org |
1005 Ouellette Avenue, Windsor, ON N9A 4J8 | 33 Princess Street, Leamington, ON N8H 5C5

MEDICAL SURVEILLANCE HEALTH CARE PROVIDER REPORT

Please complete this form and **FAX** to 226-783-2132

Client Name: _____ / _____ / _____
Last Name First Name Middle Name

Sex: _____ **DOB:** _____/_____/_____
Year Month Day

Additional Information: _____

_____

Name of Physician / RN(EC): (Please print or stamp) _____

ASSESSMENT DATE: _____

TUBERCULIN SKIN TEST:

Date of Test 1: _____ Date Read: _____ Result: _____mm Interpretation: _____
Date of Test 2: _____ Date Read: _____ Result: _____mm Interpretation: _____

Date of CHEST X-RAY (PA AND LAT): _____ Interpretation: _____
(Please attach copy with this form)

SPUTUM (3 are to be collected if indicated by history or radiological findings)

☐ Not done. ☐ Collected:
Dates: 1.) _____ 2.) _____ 3.) _____

DIAGNOSIS:

☐ Active disease has been ruled out.
☐ Client has TB Infection / Inactive TB

TB PREVENTIVE TREATMENT:

☐ Recommended for client, and client accepted treatment. ***Free TB medication is dispensed by the Health Unit by appointment.***
☐ Recommended for client; however, client declined treatment.
☐ Not recommended by physician/nurse practitioner.
Specify reason: _____

Physician/RN(EC) Signature: _____

PRESCRIPTION

Client's weight: _____

☐ Rifampin Dose: _____ PO OD _____ months (First-line regimen)
(number)

OR

☐ Isoniazid (INH) Dose: _____ PO OD _____ months (Second-line regimen)
(number)

☐ Pyridoxine Hydrochloride (Vitamin B6) 25 mg PO OD _____ months
(number)

Physician/RN(EC) Signature: _____ Date: _____

This information is collected under the authority of the Health Protection and Promotion Act R.S.O. 1990, C.H7 s5 for the purpose of preventing the spread of communicable diseases in Windsor and Essex County.

RESOURCES

This section contains various resources and educational materials for healthcare providers and their patients.

Please visit **wechu.org** or **publichealthontario.ca** for the most up-to-date and downloadable versions.

TORONTO Public Health

Place Client ID Label Here

Contact Screening Parameters Tool

INSTRUCTIONS

This tool provides the **MINIMUM guidelines for initial follow-up** of contacts of infectious tuberculosis (TB) cases. Contact investigation outcomes must be analyzed for all settings to decide if contact follow-up should be expanded.

This tool should be used in conjunction with Toronto Public Health's (TPH) TB Contact Identification and Evaluation Procedure. **If variations to parameters exist**, media attention expected, and/or cases spent time in school, daycare, long-term care, shelters/corrections, or high risk facilities (e.g. hospital settings), an immediate discussion with TB manager and AMOH is required. The cumulative hour thresholds are guidelines, not absolute.

Definitions and Considerations	
Cumulative exposure	Total number of hours during the case's period of infectivity that contacts shared the same airspace with the case (and contact did not use an N95 mask). In facility settings, contacts may include direct care and support staff, volunteers, visitors, etc.
Period of infectivity (POI)	Calculate start of infectivity by counting back from TB symptom onset or date of first test indicating TB, whichever is first, as below: • *For smear negative and CXR normal/non-cavitary*: 4 weeks • *For smear positive and CXR normal/non-cavitary OR smear negative and CXR cavitary*: 8 weeks • *For smear positive and CXR cavitary*: 12 weeks POI normally ends on the date the case is placed in respiratory isolation. See break in contact.

Break in contact (BIC)	• Last date a contact was exposed to an active infectious TB case (e.g. last day at work/school, date placed in negative pressure respiratory isolation in hospital). Repeat TST is done at least 8 weeks after BIC.
	• BIC may vary in different settings – please note on the TPH Contact Investigation Line List (CILL) and on BIC column below.
	• For case in home isolation with fully sensitive TB (or INH resistant only), for household contacts 5+ years use BIC =
	  • *For smear negative*: 2 weeks on effective treatment
	  • *For smear positive*: 4 weeks on effective treatment OR date of smear conversion, whichever first
	• For household contacts <5 years old, when case is in home isolation BIC is the date case is no longer infectious.

Effective TB treatment (in relation to BIC)	On standard RIPE treatment, or as appropriate for known drug sensitivities (see Canadian TB Standards) AND clinical improvement AND tolerating medication with no breaks in treatment. For smear positive: AND repeat sputum smears declining.
Initial & repeat tuberculin skin test (TST)	All contacts should be assessed for TB signs and symptoms when doing a skin test. Initial tuberculin skin test means it should be done as soon as possible, then repeated ≥8 weeks after BIC date.
Ventilation	In poorly ventilated spaces, consider lowering threshold for exposure time. Example: a small room with radiator/baseboard heating, no forced air and no open windows. Consider the direction/path of air flow (e.g. fan blowing air from infectious patient towards others; basement apartment in a house with forced air furnace - air recirculates through entire house). If number of air changes per hour (ACH) is available, 6 or more ACH is considered good ventilation; below 2 ACH is considered poor ventilation.
Clinical pulmonary case	(a) Radiology suggestive of active pulmonary TB AND culture negative on respiratory sample (or no laboratory specimens available), OR (b) PCR positive on lung biopsy. If deceased and no specimens will be available, clinical consultation may be necessary to determine the working classification of the case.
Pleural TB	If sputum/BAL is culture positive, manage as pulmonary case. If radiology indicates pulmonary involvement (e.g. infiltrates, cavities) but sputum/BAL culture negative, manage as clinical pulmonary case. If radiology does not indicate pulmonary involvement and sputum/BAL culture negative, manage as extrapulmonary - no contact follow-up.
TB wounds (smear and culture positive tissue/fluid from surgical wounds, abscesses)	Diseased tissues are not typical sources of infection unless procedures create aerosols. Staff involved in high pressure irrigation of open TB wounds, orthopaedic procedures (i.e. cutting with power tools) or cauterization of TB infected tissue while not wearing a N95 mask should be screened. Dressing changes with or without packing but no irrigation do not need screening. Autopsy and embalming have also been associated with TB transmission; staff not using an N95 mask during these procedures on a deceased untreated TB case should be screened.
Cough inducing procedure	Refers to aerosol-generating procedures (e.g. bronchoscopy, sputum induction, suctioning if not a closed system, intubation/extubation, CPAP). Staff must be present during the procedure without an N95 mask to be at risk.
<1 year of age contacts	Start with minimum guideline for contacts <5 years old and consider lowering threshold based on closeness of exposure (e.g. index case held baby while infectious).
Elderly contacts	For community-living contacts 85 years or older: in addition to symptom screening, do a chest x-ray rather than a TST. For long-term care contacts, see section 3 below.
Immunosuppressed contacts	Examples of immunosuppressed contacts include HIV positive with low CD4 counts; dialysis, oncology, and transplant patients. Consider lowering threshold based on extent of immunosuppression and closeness of exposure (e.g. direct caregivers). Consider symptom assessment and chest x-ray with or without TST, and flag TB exposure in the client's hospital/physician chart.
Masks	Only N95 masks are considered adequate PPE for TB. Surgical masks are not considered sufficient PPE.

1. Assess Case Level of Infectivity (LOI)

- For **extrapulmonary cases,** no contact follow-up required so long as pulmonary involvement has been ruled out and no wound care.
- **Source case investigation** indicated for children less than 5 years of age only.
- **Child cases <10 years of age** are rarely infectious; no contact follow-up required unless cavitary disease or smear positive sputum / gastric lavage.
- For **clinical** pulmonary TB cases, only screen household contacts.
- For **laryngeal** TB, score as high risk regardless of smear/chest x-ray score. If also pulmonary involvement, lower exposure threshold.
- For all other pulmonary TB cases, score level of infectivity rating by adding highest smear count (from sputum, BAL, or gastric aspirate specimens) and chest x-ray results:

Check all that apply:

◯ Pulmonary → proceed to level of infectivity rating

◯ Clinical pulmonary → proceed to section 3

◯ Extrapulmonary (wound care only) → proceed to bottom of page 2

◯ Extrapulmonary (no pulmonary involvement, no wound care) → stop here

Circle smear and chest x-ray score, add scores for level of infectivity rating:

HIGHEST SMEAR	Negative/Not applicable	0
	Scarce/Moderate (few, 1+, 2+)	1
	Numerous (3+, 4+)	2
plus		
CHEST X-RAY	Normal/Calcified granuloma	0
	Infiltrates/Opacities/Fibronodular densities	1
	Cavitation	2

LEVEL OF INFECTIVITY RATING =

Risk Level

0 ……Low

1 ……Low

2 ……Low

3 ……High

4 ……High

2. Establish Case Period of Infectivity (POI)

Beginning of Infectiousness yyyy/mmm/dd:	**Date of Respiratory Isolation** yyyy/mmm/dd:	**Treatment Start Date** yyyy/mmm/dd:

3. Identify Contacts Requiring Follow-up and Establish Break In Contact – *please complete the following:*

Location of Exposure	Low Risk (0 – 2)	High Risk (3 – 4)	Contacts meeting criteria? (complete CILL for each "yes")		Name of Facility	BIC
Household	• Everyone in household – *initial & repeat TST* • For rooming houses/basement apartments, consider those on the same floor as "household"	• Everyone in household – *initial & repeat TST* • For rooming houses/basement apartments with forced air, consider all floors as "household"	No	Yes		
Close non-household (e.g. family, friends)	• Contacts ≥ 5 years old with **≥ 120 hours** cumulative exposure – *initial & repeat TST* • Contacts < 5 years old or immunosuppressed contacts with **≥ 60 hours** cumulative exposure – *initial & repeat TST*	• Contacts ≥ 5 years old with **≥ 96 hours** cumulative exposure – *initial & repeat TST* • Contacts < 5 years old or immunosuppressed contacts with **≥ 36 hours** cumulative exposure – *initial & repeat TST*	No	Yes		
Worksites / Universities / Colleges	• Smear negative index case – *no screening* • Smear positive index case – follow-up contacts with **≥ 120 hours** of cumulative exposure in a poorly ventilated or small space (e.g. approximately 150 square feet) – *TST > 8 weeks BIC*	• Contacts with **≥ 96 hours** of cumulative exposure in a medium space (e.g. classroom or smaller size space), or within 8 feet of index case in a large space (e.g. lecture hall, large open warehouse or open office floor) – *TST > 8 weeks BIC* • Lower threshold for poorly ventilated or small space (e.g. lunch room, approximately 150 square feet)	No	Yes		
School Contacts ≥ 5 years of age (excludes universities/ colleges)	• Smear negative index case – *no screening* • Smear positive index case – follow-up contacts with **≥ 120 hours** of cumulative exposure in classroom and group activities – *initial & repeat TST*	• Contacts with **≥ 96 hours** of cumulative exposure in classroom and group activities – *initial & repeat TST*	No	Yes		
Daycare / School Contacts < 5 years of age	• Contacts < 5 years old with **≥ 60 hours** cumulative exposure – *initial & repeat TST* • Staff/volunteers with **≥ 120 hours** cumulative exposure – *initial & repeat TST*	• Contacts < 5 years old with **≥ 36 hours** cumulative exposure – *initial & repeat TST* • Staff/volunteers with **≥ 96 hours** cumulative exposure – *initial & repeat TST*	No	Yes		
Shelters / Group Homes / Drop-ins	• Contacts ≥ 5 years old who spent **≥ 5 nights** sleeping in the same room – *TST > 8 weeks BIC* • Staff and others with **≥ 120 hours** cumulative exposure – *TST > 8 weeks BIC* • Contacts < 5 years old or immunosuppressed contacts with **≥ 60 hours** cumulative exposure – *initial & repeat TST*	• Contacts ≥ 5 years old who spent **≥ 3 nights** sleeping in the same room – *TST > 8 weeks BIC* • Staff and others with **≥ 96 hours** cumulative exposure – *TST > 8 weeks BIC* (for staff, initial TST may also be feasible) • Contacts < 5 years old or immunosuppressed contacts with **≥ 36 hours** cumulative exposure – *initial & repeat TST* • If <u>infectious case</u> spent **≥ 60 hours** in facilities with drop-in services, consider holding site-based screening in addition to the above.	No	Yes		
Correctional Facilities	• Contacts who spent **≥ 5 nights** sleeping in the same cell – *initial & repeat TST* • Staff and others with **≥ 120 hours** cumulative exposure – *TST > 8 weeks BIC*	• Contacts who spent **≥ 3 nights** in same cell – *initial & repeat TST* • Staff and others with **≥ 96 hours** cumulative exposure – *initial & repeat TST*	No	Yes		
Long Term Care, Assisted Living and Retirement Facilities, Home Care	• Residents who spent **≥ 5 nights** sleeping in the same room or residents with **≥ 120 hours** cumulative exposure in a medium size space (e.g. classroom or smaller size space) – *initial symptom screen and CXR; if symptomatic, collect sputum as well. Consider TST if prophylaxis is an option. Recommend LTCF to flag TB exposure on resident chart and that they conduct enhanced TB symptom surveillance for 2 years.* • Staff with direct patient care and others with **≥ 120 hours** cumulative exposure in classroom size or smaller airspace – *TST > 8 weeks BIC*	• Residents who spent **≥ 3 nights** sleeping in the same room or residents with **≥ 96 hours** cumulative exposure in a medium size space (e.g. classroom or smaller size space) or within 8 feet in a larger size room (e.g. large dining hall) – *initial symptom screen and CXR; if symptomatic, collect sputum as well. Consider TST if prophylaxis is an option. Recommend LTCF to flag TB exposure on resident chart and that they conduct enhanced TB symptom surveillance for 2 years.* • Staff with direct patient care and others with **≥ 96 hours** cumulative exposure – *TST > 8 weeks BIC*	No	Yes		
Hospitals and Clinics	• Patients with **≥48 hours** cumulative exposure in the same room, or for larger bay areas the patients in adjacent beds, or participation in patient group activities (e.g. pediatric play room, psychiatric group programs) – *TST > 8 weeks BIC, unless <5 years old, initial & repeat TST* • Staff with direct patient care for **≥60 hours** cumulative exposure; all staff involved during cough inducing/aerosolizing procedures if not wearing PPE – *TST > 8 weeks BIC*	• Patients with **≥ 24 hours** cumulative exposure in the same room, or participation in patient group activities (e.g. pediatric play room, psychiatric group programs) – *TST > 8 weeks BIC, unless <5 years old, initial & repeat TST* • Staff with direct patient care **≥ 36 hours** cumulative exposure; all staff involved during cough inducing/aerosolizing procedures if not wearing PPE – *TST > 8 weeks BIC*	No	Yes		
Emergency Medical Services	Notify EMS of situation and recommend if any follow-up is needed (use above hospital staff parameters)	Notify EMS of situation and recommend if any follow-up is needed (use above hospital staff parameters)	No	Yes		
Public Travel	• For air travel, utilize Public Health Agency of Canada guidelines • For long distance (i.e.>8 hours) public bus and train travel, consider follow-up only if evidence of transmission among closer contacts. • No follow-up for local public transit (e.g. TTC, GO train).		No	Yes		
Wound Care	• Wound specimens smear negative – *no screening.* • Wound specimens smear <u>and</u> culture positive – staff involved in high pressure irrigation of open TB wounds, orthopaedic procedures (i.e. cutting with power tools) or cauterization of TB infected tissue while not wearing a N95 mask should be screened – *TST > 8 weeks BIC*		No	Yes		

TREATMENT FOR LATENT TB (TUBERCULOSIS) INFECTION

YOU HAVE LATENT TB INFECTION

This means you have come into contact with the TB germ (bacteria) some time in your past. Your body has built a "wall" around the TB germ and it is now "sleeping" (dormant). The TB germ is not making your body sick and you cannot spread the germ to anyone else.

Your health care provider has prescribed a medicine that will kill the TB germ while it is sleeping. You are taking this medicine to reduce your risk of the TB germ waking up in the future and making you sick with TB disease. The medicine is free from the Windsor-Essex County Health Unit.

ISONIAZID (INH)

This medicine must be taken daily for a minimum of 6 months, usually 9 months.

RIFAMPIN

This medicine must be taken daily for 4 months.

IMPORTANT TO KNOW

- You may need to have blood work done before you start the medicine and during treatment.
- You need to take your medicine every day. Use a dosette (pill box) to help you to remember.
- Take your medicine on an empty stomach (1 hour before or 2 to 3 hours after eating).
- Do not drink alcohol while taking this medicine because it can hurt your liver.
- You must finish all of the medicine. If you miss taking your medicine or stop before your treatment is done, your body may build a resistance to the medicine.

What happens if I forget to take my medicine?

- If you miss a dose, take it as soon as possible. If it is almost time to take your next dose, do not take the missed dose. **Do not take 2 doses at the same time.**

Possible side effects

Both INH and Rifampin are safe. Most people can take either of these medicines without having problems. Liver problems are the most serious concern. Tell your doctor if you have liver disease, are taking any other medication, or drink alcohol. People who are older may be more sensitive to these medicines.

Call your health care provider if you are experiencing any of these symptoms:

- Loss of appetite, nausea, vomiting, fatigue, or weakness for more than 3 days.
- Brown or very dark urine.
- Yellow skin or eyes.
- Fever for more than 3 days.
- Abdominal tenderness, especially right upper abdominal discomfort.
- Rash and/or itching.

Other side effects for INH could include:

- Change in vision. You should see an eye specialist.
- Headache.
- Numbness and tingling in the hands and feet occurs rarely. Your health care provider may prescribe pyridoxine (vitamin B6) to prevent this from happening.

Other side effects for Rifampin could include:

- Your tears, urine, saliva, sweat and feces may be coloured red-orange by the medicine. This side effect is common and occurs only while you are taking the medicine. You may not be able to wear contact lenses during this time as they may become permanently stained.
- This medicine can make birth control drugs less effective. If you are taking a birth control drug, you should use an additional birth control method, such as a condom.

If you have side effects that may be from the medicine and can not contact your health care provider immediately, stop your medicine until you have had a medical evaluation.

References available upon request.

I MUST REMEMBER...

- ☐ To take my medicine on an empty stomach.
- ☐ To take my medicine at the same time every day.
- ☐ To use my dosette and keep it in a safe place.
- ☐ Not to drink alcohol.
- ☐ To see my health care provider if I have any problems.
- ☐ Not to take the pain medicine acetaminophen (Tylenol or other medicine that contains it).
- ☐ To pick up more medicine before I run out.
- ☐ To check with my health care provider or pharmacist before taking any new medicines.

Your public health nurse is:

_____

and they can be reached at:

519-258-2146 ext._____

You may pick up medication by appointment
Monday to Friday 8:30 a.m. to 4:15 p.m.

WINDSOR-ESSEX COUNTY **HEALTH UNIT**
519-258-2146 ext. 1420
Toll free: 1-800-265-5822
1005 Ouellette Avenue, Windsor, ON N9A 4J8

WINDSOR-ESSEX COUNTY HEALTH unit
Bureau de santé de Windsor-comté d'Essex

wechu.org

step-by-step guide to mantoux testing

TB tuberculosis

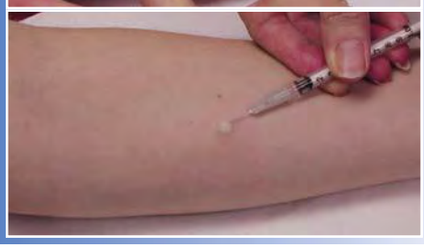
Have all equipment ready. Tubersol® 5 tuberculin units of PPD is recommended. Check expiry dates. Use a disposable tuberculin syringe and a ¼ to ½", 26 or 27 gauge needle with a short bevel. Store tuberculin between 2°C and 8°C. Discard the solution within 1 month of opening, or if it has been exposed to freezing.

DAY 1

Seat the client comfortably. Rest the client's arm on a firm, well-lit surface. Make sure there is a slight bend at the elbow and the arm rests palm up. Clean the injection site with an alcohol pad and let dry. Avoid areas of damaged or broken skin, swelling, rash, or visible veins. If neither forearm is suitable, use the outside of the forearm or the upper arm.

Do not inject air into the vial when doses are being drawn. Draw up a little more than 0.1 ml using aseptic conditions. Hold the syringe upright and tap it lightly to remove air, then expel one drop. Check that a full 0.1 ml remains in the syringe.

Injection site is on the inside surface of the forearm, about 10 cm (4") below the elbow. Stretch the skin taut with your free hand. Hold the syringe almost parallel (5-15° angle) to the skin. Insert the needle, bevel up, so that the tip of the needle is visible just below the surface of the skin. The entire bevel should be covered. Release the skin and slowly inject 0.1mL of tuberculin. You will feel a slight resistance.



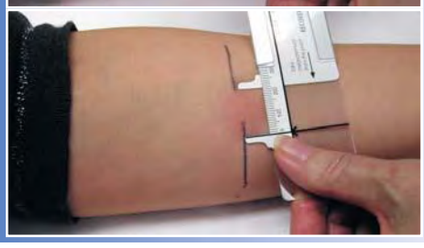
A firm, pale wheal 6-10 mm in diameter should appear immediately. If a lot of the fluid leaks out onto the skin or no wheal appears, administer a second injection on the other arm or at least 5-10cm (2") from the first site. Document the location of the second site. It is normal for a drop of blood to appear when the needle is re- moved. Advise the client to dab the spot gently to remove the blood. Do not press on the site as it could squeeze out the tuberculin and ruin the test. Do not cover with a bandage.

DAY 2

The test is read 48 to 72 hours after being administered. Make sure the client's forearm is slightly flexed at the elbow. Check for induration (hardness) by inspecting the arm from a side view against the light as well as by direct light, and by palpating the arm with a gentle stroke of the finger.

If induration (not blistering) is present, the transverse diameter, to the long axis of the forearm is measured. Sometimes the precise edge of induration is difficult to palpate. Push the tip of a ballpoint pen at a 45° angle toward the site of the injection. The tip will stop at the edge of the induration.

Measure the size of induration between the pen points with a caliper or flexible ruler. Record the size of induration in millimetres. If the measurement falls between demarcations on the ruler, record the smaller of the two numbers. If the client has no induration, record the result as 0 mm. Provide a record to the client.



Erythema or redness is not measured. The development of erythema does not indicate infection. A tuberculin reaction (induration) of 10 mm or more is classified as positive for all individuals.

For more information on Tuberculosis and the Mantoux test call the Windsor-Essex County Health Unit at 519-258-2146, ext.1420 or visit www.wechu.org

WINDSOR-ESSEX COUNTY HEALTH unit
Bureau de santé de Windsor-comté d'Essex

TIPS TO HELP PRODUCE A SPUTUM SAMPLE

This document outlines steps for patients to loosen phlegm in the lungs and to easily produce sputum samples for testing. These steps are summarized from a video by the National Aspergillosis Centre, UK. To view the video, please click the following link: https://aspergillosis.org/active-cycle-of-breathing-technique/

Deep Breaths

1. Get as much air as possible in your lungs by taking a very deep breath in. Hold that breath for a couple seconds and then let the breath out passively (don't forcefully exhale).
2. Take about 3-5 of these deep breaths. Stop if you begin to feel lightheaded or dizzy.

Average Breath and Long Huffs

3. Take an average breath in, then a long slow **huff** out. (**Huff:** forced breath out with relaxed cheeks). Picture that you are fogging a pair of glasses or a mirror. This step will start easy but you will begin to need to use your abdominal and chest muscles to complete the huffs. With each huff push out all the air in your lungs.
4. Do 3-5 average breaths with long slow huffs. You may begin to hear rattling or wheezing.

Deep Breath and Short Huffs

5. Take a very deep breath in and then right away do a short strong huff out.
6. Complete for a maximum of 3 times.

Cough

7. Then do a big, strong cough.

Repeat cycle (Steps 1-7) several times through until there is enough sputum for a sample. Only try for 5-10 minutes. If no sputum is being produced take a break, and try again. Or speak to your public health nurse. If you have additional questions about producing a sputum sample, please contact the Windsor-Essex County Health Unit (WECHU) at **519-258-2146 ext. 1420.**

SPUTUM KIT INSTRUCTIONS

INFORMATION FOR CLIENTS

Instructions:

1. Open the biohazard bag and remove the sterile container. Do not touch the inside of the container.
2. Collect sputum specimens early in the morning, before eating. The sample should not be pure saliva or nasal secretions. Do not rinse your mouth with tap water or brush your teeth before producing sputum.
3. 5mL of sputum is optimal. (About 1 teaspoon.) You may cough up several times into the container.
4. Put the cap back on the container tightly.
5. Place specimen container in the biohazard bag and seal the bag.
6. **Keep the specimen refrigerated** until time for pick up or drop off.

For more information, please contact your healthcare provider or the Windsor-Essex County Health Unit Infectious Disease Prevention Department at 519-258-2146 ext. 1420

Windsor-Essex County Health Unit
1005 Ouellette Ave. Windsor N9A 4J8

HOW DO YOU TEST FOR TB?

Screening for TB is done by a tuberculin skin test (TST) or an Interferon-Gamma Release Assay (IGRA) blood test.

A TB skin test shows if you have been exposed to the TB bacteria and have it in your body. It is not a vaccine. A TST is safe during pregnancy. You can still have a test if you had a Bacille Calmette-Guérin (BCG) vaccine in the past.

The BCG vaccine is not routinely given in Canada, but it is often given to infants and small children in other countries with high rates of TB. The vaccine becomes less effective over time. You can still be infected with TB even if you have received the BCG vaccine.

Your health care provider may recommend one or both tests. A positive TST or IGRA result means a person has the TB bacteria in their body. A physical exam and chest x-ray are needed to check for TB disease; further testing may also be needed.

Canadian Tuberculosis Standards (8th edition).

FOR ADDITIONAL INFORMATION, PLEASE CONTACT US AT:

Windsor-Essex County Health Unit

519-258-2146 ext. 1420

Toll free: 1-800-265-5822

Windsor Office:
1005 Ouellette Avenue
Windsor, ON N9A 4J8

Leamington Office:
33 Princess Street
Leamington, ON N8H 5C5

www.wechu.org

Stop tuberculosis now.

WINDSOR-ESSEX COUNTY HEALTH unit
Bureau de santé de Windsor-comté d'Essex

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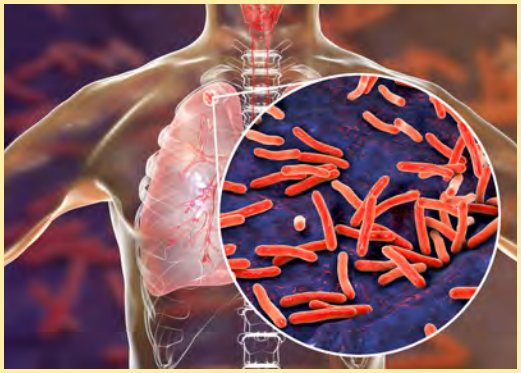
WHAT IS TUBERCULOSIS (TB)?

wechu.org



WHAT IS TUBERCULOSIS?

Tuberculosis (TB) is a disease caused by bacteria called mycobacterium tuberculosis.

The bacteria enter the body through air you breathe and causes an infection, usually in the lungs. Sometimes infections can happen in other parts of the body.

When the bacteria are dormant (asleep), people do not have active TB disease. This is called latent TB infection. These bacteria are not making you sick at this time, and you cannot pass the bacteria to other people.

Active TB disease occurs when bacteria multiply, causing damage to the lungs or other parts of the body, such as the brain, lymph nodes, or kidneys. People with active TB disease may pass the bacteria to others.

HOW DOES **TB SPREAD**?

- Spread from person to person through the air.
- When someone with active TB disease in the lungs speaks, coughs, or sneezes.
- Close, prolonged, or regular contact with someone who is sick with active TB disease is needed to spread this disease.
- People with latent TB infection (LTBI) cannot spread TB bacteria to others.

HOW IS **TB TREATED**?

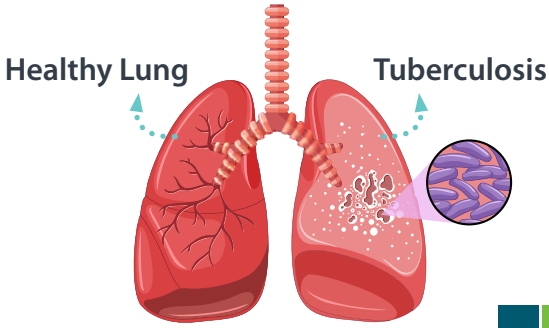
People with latent TB infection (LTBI) may benefit from medication to prevent active TB disease. People with active TB disease must complete treatment to cure the disease. TB medication is free from the Health Unit with a prescription from a health care provider.

WHO SHOULD **BE TESTED**?

TB can affect anyone regardless of age, gender, ethnicity, or race but some people are at greater risk. Health care workers and people who have lived, worked, or travelled to areas that have high TB rates should speak to their health care provider or contact the Health Unit for more information.

SIGNS AND SYMPTOMS OF ACTIVE TB

- Coughing that lasts three or more weeks
- Chest pain or pain with breathing or coughing
- Loss of appetite
- Chills
- Unintentional weight loss
- Fatigue
- Night sweats
- Fever
- Coughing up blood



Symptoms vary depending on where the bacteria are growing in the body. For example, if the lymph nodes or joints are infected, you may experience swollen lymph nodes or joint pain.